

CLAIM AMENDMENT

Please cancel claims 1-40 without prejudice or disclaimer. Please add new claims 41-63 as set forth below.

1-40. (Canceled)

41. (New) A method of vaccinating a subject comprising:

(a) obtaining a nucleic acid encoding an antigen or an antigen that is encoded by said nucleic acid, wherein the nucleic acid or antigen has been determined to elicit an immune response by a method comprising the steps of:

- i) obtaining a library comprising DNA or RNA sequences from a pathogen;
- ii) introducing a plurality of members of said library into an animal; and
- iii) selecting at least a first member from the library that elicits an immune response to identify said nucleic acid or antigen; and

b) administering the nucleic acid or antigen to a subject in a manner effective to vaccinate the subject against the pathogen.

42. (New) The method of claim 41, wherein the pathogen is a virus, yeast, mold, algae or protozoa.

43. (New) The method of claim 41, wherein the pathogen is a bacterial cell.

44. (New) The method of claim 43, wherein the bacterial cell is identified as *Mycoplasma pulmonis* or *Listeria monocytogenes*.

45. (New) The method of claim 41, wherein the library is prepared using a bacterial host cell.

46. (New) The method of claim 41, wherein the library is prepared using a mammalian host cell.

47. (New) The method of claim 45, wherein the bacterial cell is an *E. coli*.

48. (New) The method of claim 41, wherein the DNA or RNA is fragmented physically or by restriction enzymes.

49. (New) The method of claim 48, wherein fragments are about 100-1000 bp.

50. (New) The method of claim 48, wherein the fragments are about 400 bp.

51. (New) The method of claim 41, wherein the DNA or RNA is fused to a mammalian gene.

52. (New) The method of claim 51, wherein the mammalian gene encodes a fusion protein.
53. (New) The method of claim 52, wherein the fusion protein is ubiquitin or human growth hormone.
54. (New) The method of claim 41, wherein the library is about 1×10^2 to about 1×10^7 members.
55. (New) The method of claim 41, wherein the library is about 10^3 to about 10^5 members.
56. (New) The method of claim 41, wherein the library is about 10^4 members.
57. (New) The method of claim 41, wherein about 8 μg to about 12 μg of DNA or RNA is introduced into the animal.
58. (New) The method of claim 41, wherein about 10 μg of DNA or RNA is introduced into the animal.
59. (New) The method of claim 58, wherein the DNA or RNA is introduced by gene gun or injection.
60. (New) The method of claim 41, wherein the expression library comprises a vector that includes a promoter suitable for expression in a mammalian cell.
61. (New) The method of claim 60, wherein the vector includes a signal sequence positioned upstream of the DNA or RNA.
62. (New) The method of claim 41, wherein the library is a cloned expression library.
63. (New) The method of claim 41, wherein the DNA or RNA is synthesized chemically.